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Nathan Schumaker <[redacted]>

fecundity and survival point estimates and SE from Forsman et al (2010)

5 messages

Jeffrey Dunk <Jeffrey.Dunk@humboldt.edu> **Thu, Oct 7, 2010 at 1:31 PM**
To: [redacted], Marty Raphael <mraphael@fs.fed.us>, "Bruce G. Marcot" <brucem@spiritone.com>
Cc: Brian_Woodbridge@fws.gov, Brendan_White@fws.gov

Hi Guys:

Great to see you all on Tuesday in Portland. I thought the meeting was very productive, and that the FWS managers were very engaged (based on their questions and involvement in the discussions).

Regarding introducing stochasticity into the HexSim models, we talked about using data from the recent meta-analyses. I've copied a few of (what I believe to be) the pertinent tables from Forsman et al. – and attached them to this e-mail. They include point estimates and standard errors by age class. When we introduce stochasticity, do we want to sample from the mean +/- 2SE or mean +/- 2SD? It would seem that we might want the mean +/- 2SD to capture the year-to-year variation that the data suggests to have existed. One of the tables, you'll notice, has adult fecundity estimates by ecoregion as well (if we're interested in that).

Take care,

Jeff

Jeffrey R. Dunk

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Tables from Forsman et al (2010).doc
75K

Martin Raphael <mraphael@fs.fed.us> **Thu, Oct 7, 2010 at 2:49 PM**
To: Jeffrey Dunk <Jeffrey.Dunk@humboldt.edu>
Cc: Brendan_White@fws.gov, Brian_Woodbridge@fws.gov, "Bruce G. Marcot" <brucem@spiritone.com>, [redacted]

Here are two snippets from Forsman et al abstract that show why I think recruitment varies with habitat quality:

"The percent cover of suitable owl habitat was in the top fecundity model for all study areas in Oregon, and in competitive models for two of the three study areas in Washington."

"Based on the top-ranked *a priori* model in the meta-analysis of ë, there was evidence that ecological regions and the proportion of Spotted Owl territories with Barred Owl detections were important sources of variation for apparent survival ($ö_t$) and recruitment (f_t). There was some evidence that recruitment was higher on study areas dominated by federal lands compared to study areas that were on private lands or lands that included approximately equal amounts of federal and private lands. There also was evidence that recruitment was positively related to the proportion of the study area that was covered by suitable owl habitat."

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Martin G. Raphael
Team Leader, Wildlife Ecology
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"Jeffrey Dunk" <Jeffrey.Dunk@humboldt.edu>

10/07/2010 01:34 PM

To <[redacted]>, "'Marty Raphael'" <mraphael@fs.fed.us>, "'Bruce G. Marcot'" <brucem@SpiritOne.com>
cc <Brian_Woodbridge@fws.gov>, <Brendan_White@fws.gov>
Subject fecundity and survival point estimates and SE from Forsman et al (2010)

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[attachment "Tables from Forsman et al (2010).doc" deleted by Martin Raphael/PNW/USDAFS]

Martin Raphael <mraphael@fs.fed.us> **Thu, Oct 7, 2010 at 2:52 PM**
To: Jeffrey Dunk <Jeffrey.Dunk@humboldt.edu>
Cc: Brendan_White@fws.gov, Brian_Woodbridge@fws.gov, "Bruce G. Marcot" <brucem@spiritone.com>, [redacted]

I agree with the mean +/- 2SD concept to capture year to year variation. But I also think sampling should be from a normal distribution not a uniform distribution.
--marty

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Subject fecundity and survival point estimates and SE from Forsman et al (2010)

[Quoted text hidden]

Tables from Forsman et al (2010).doc
75K

Jeffrey Dunk <Jeffrey.Dunk@humboldt.edu> **Thu, Oct 7, 2010 at 5:06 PM**

To: Martin Raphael <mraphael@fs.fed.us>
Cc: Brendan_White@fws.gov, Brian_Woodbridge@fws.gov, "Bruce G. Marcot" <brucem@spiritone.com>, [redacted]

I agree – from a normal distribution..

Jeff

From: Martin Raphael [mailto:mraphael@fs.fed.us]
Sent: Thursday, October 07, 2010 2:53 PM
To: Jeffrey Dunk
Cc: Brendan_White@fws.gov; Brian_Woodbridge@fws.gov; 'Bruce G. Marcot'; [redacted]
Subject: Re: fecundity and survival point estimates and SE from Forsman et al (2010)

[Quoted text hidden]

Bruce G. Marcot <brucem@spiritone.com> **Thu, Oct 7, 2010 at 6:14 PM**
To: Jeffrey Dunk <Jeffrey.Dunk@humboldt.edu>
Cc: Martin Raphael <mraphael@fs.fed.us>, Brendan_White@fws.gov, Brian_Woodbridge@fws.gov, [redacted]

Good call, guys ... +/-2SD drawn from a normal distribution.
Agreed.
- bruce

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Bruce G. Marcot, Ph.D. Research Wildlife Ecologist
brucem@SpiritOne.com
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Ecology Picture of the Week:
http://www.taos-telecommunity.org/epow/
The Plexus -- Where Disciplines Collide:
http://www.spiritone.com/~brucem
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** personal correspondence **
